

WHAT IS CLAIMED IS:

1. A method of forming a fin for a fin field effect transistor (FinFET), comprising:
defining a trench in a layer of first material;
growing a second material in the trench to form the fin; and
removing the layer of first material.
2. The method of claim 1, wherein the first material comprises an oxide.
3. The method of claim 1, wherein defining a trench comprises:
forming the layer of first material on a substrate; and
selectively etching the layer to define the trench.
4. The method of claim 1, wherein growing the second material comprises epitaxially growing the second material.
5. The method of claim 1, wherein removing the layer of first material comprises stripping the layer.
6. The method of claim 1, further comprising:
forming a spacer on an upper surface of the fin.
7. The method of claim 6, wherein forming the spacer comprises depositing a third material on the upper surface.
8. The method of claim 7, wherein the third material comprises a nitride.

9. The method of claim 1, wherein the second material comprises silicon.
10. The method of claim 6, further comprising:
forming a liner on the spacer and fin, the liner comprising a third material.
11. The method of claim 10, wherein the third material comprises a nitride.
12. The method of claim 10, wherein the third material comprises an oxide.
13. The method of claim 10, further comprising:
removing the spacer and liner.
14. The method of claim 13, wherein removing the spacer and liner comprises: stripping the
spacer and liner.
15. A fin field effect transistor (FinFET), comprising:
a substrate;
a fin channel epitaxially grown on the substrate; and
source and drain regions formed adjacent the fin channel.
16. The FinFET of claim 15, wherein the fin channel comprises silicon.

17. A structure for a constructing a fin field effect (FinFET) transistor, comprising:

a seed layer;

a layer of a first material formed on the seed layer, the layer of first material having a trench; and

5 a fin epitaxially grown in the trench.

18. The structure of claim 17, wherein the first material comprises an oxide.

19. The structure of claim 17, wherein the fin comprises silicon.